AXB and BXA RI strains are useful in genetic analysis of complex diseases. Individual strains within the RI set differ in susceptibility to infectious diseases and responses to alcohol, stress, and endotoxin. AXB and BXA strains are derived from C57BL/6J (Stock No. 000664) and A/J (Stock No. 000646) progenitor strains.

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nrg3^{ska}</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous</td>
<td>Nrg3</td>
<td>neuregulin 3</td>
</tr>
</tbody>
</table>

**RESEARCH APPLICATIONS**

Neurobiology Research
Research Tools

**BASE PRICE**

Starting at:
$2,854.50 Domestic price Cryo Recovery
Details

Detailed Description

Through high density SNP analysis, some AXB and BXA recombinant inbred strains were shown to be the same or nearly the same genetically. AXB18/Pgn, AXB19/Pgn, and AXB20/Pgn were found to be highly similar in their overall genomes, but with particular Chromosomes differing between them. Two of these "sister" strains were renamed. AXB19/Pgn was designated the primary strain since it has the best traceable history, and therefore its name remained unchanged. AXB18/Pgn was renamed AXB19a/Pgn and AXB20/Pgn was renamed AXB19b/Pgn. In general, the "sister" strains (those with suffixes of a or b) should not be used for primary screening/QTL mapping. However, if a QTL is located in a region of difference in a sister recombinant inbred then this strain can serve as a "near congenic" for additional analysis.

The AXB and BXA set of RI strains are useful in the genetic analysis of several complex diseases including cardiovascular disease, diabetes, cancer, cleft palate, and hydrocephalus. The individual strains within the RI set also differ in their susceptibility to infectious diseases and in their responses to alcohol, stress, and endotoxin.

The strain distribution pattern (SDP) for the AXB RI strains is available through the Mouse Genome Informatics Contributed Data Sets and Gene Network.

Additional tools and information are presented through the Mouse Phenome Database Specialized Strain Panel Query Form, and Gene Network.

Development

Genetics

Nrg3<sup>skl</sup>

Disease/Phenotype

Disease Terms

Research Areas By Phenotype
Genotyping Protocols
Genotyping resources and troubleshooting

Appearance
black
Related Genotype: a/a Tyrp1+/Tyrp1+ Tyr+ /Tyr+

Citation
When using the AXB19b/PgnJ mouse strain in a publication, please cite the originating article(s) and include JAX stock #001688 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions

Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200

Pricing & Availability

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

<table>
<thead>
<tr>
<th>SERVICE/PRODUCT</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cryo Recovery</td>
<td>Please inquire</td>
<td>$2,854.50</td>
</tr>
</tbody>
</table>
PAYMENT TERMS AND CONDITIONS

Terms are granted by individual review and stated on the customer invoice(s) and account statement. These transactions are payable in U.S. currency within the granted terms. Payment for services, products, shipping containers, and shipping costs that are rendered are expected within the payment terms indicated on the invoice or stated by contract. Invoices and account balances in arrears of stated terms may result in The Jackson Laboratory pursuing collection activities including but not limited to outside agencies and court filings.

THE JACKSON LABORATORY’S GENOTYPE PROMISE

The Jackson Laboratory has rigorous genetic quality control and mutant gene genotyping programs to ensure the genetic background of JAX® Mice strains as well as the genotypes of strains with identified molecular mutations. JAX® Mice strains are only made available to researchers after meeting our standards. However, the phenotype of each strain may not be fully characterized and/or captured in the strain data sheets. Therefore, we cannot guarantee a strain's phenotype will meet all expectations. To ensure that JAX® Mice will meet the needs of individual research projects or when requesting a strain that is new to your research, we suggest ordering and performing tests on a small number of mice to determine suitability for your particular project. We do not guarantee breeding performance and therefore suggest that investigators order more than one breeding pair to avoid delays in their research.